

Glauert (1960). *Tiliqua leucopsis* Gray (1839: 291) could possibly be an older name for *pulchra*. However, I recommend the use of *pulchra* for this lizard; Werner's excellent description leaves no doubt as to the identity of the animal he is describing.

The population here named *bos* was lumped under *Egernia whitii* with those from further north in Glauert's recent account of the genus.

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ON THE TAXONOMIC STATUS OF THE SOUTH-WESTERN AUSTRALIAN CHESTNUT-SHOULDERED WRENS

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In a revision of the genus *Malurus*, G. Mack (1934) considered the three chestnut-shouldered wrens of South-Western Australia to be separate species even though the material available indicated that they were only geographical replacements of each other and should most probably be treated as subspecies. No evidence was available as to whether any distributional overlap and consequent possibility of hybridisation occurred. Mack's taxonomic treatment was largely followed by N. W. Cayley (1949). E. Mayr and D. L. Serventy (1944), in their summary of the number of bird species in Australia, lumped all the chestnut-shouldered wrens under the one species name. However, K. G. Buller's (1950) discovery that both *Malurus lamberti* and *pulcherrimus* occurred together at the mouth of the Murchison River stimulated Serventy (1951) to review the situation afresh. The outcome showed that

there was an overlap in the ranges of *lamberti* and *puleherrimus* of 50 to 70 miles. This data, reinforced with the fact that the third chestnut-shouldered wren of the South-West, *elegans*, occupies a distinctly different ecological niche to the other two, led Scrventy to recognize the three forms as worthy of specific rank. H. T. Condon (1951) lists *lamberti* and *pulcherrimus* as separate species but the inference is that he is rather dubious of *puleherrimus* being classified as such.

Further material collected on this controversial subject indicates that *lamberti* and *puleherrimus* have a very much wider range overlap along the west coastal strip than was previously suspected. Since October 1957 I have collected specimens of *lamberti* at the mouth of the Murchison River, Geraldton, Cockleshell Gully, Lancelin, mouth of the Moore River, Yanchep, and City Beach. This extends the known distribution of the species along the coastal plain for some 240 miles, to the vicinity of Perth. The furthest south along the coastal plain that I have collected *puleherrimus* was at the Namban River, some 50 miles west of Moora.

DETAILS OF MATERIAL COLLECTED

Since specimens of both *lamberti* and *puleherrimus* were collected at the mouth of the Murchison River by Buller, I will not elaborate on my experiences in this area other than that I collected two male specimens of the former in January 1959, and one in October 1957.

In the scrub thickets between Balline, Geraldton and Dongara, I found *lamberti* to be numerous and widespread. A male specimen was collected at Geraldton on November 2, 1957. East of Geraldton at Northern Gully, several parties of this wren were observed in January 1959.

On August 24, 1958, I collected a male specimen of *lamberti* in a patch of stunted *Casuarina glauca* in the coastal dunes, some six miles north-west of Yanchep. I saw only one party of this chestnut-shouldered wren, which comprised two fully plumaged males and several females. On September 14, this party was again seen. However, a search in the dunes immediately near the coast proved fruitless.

This surprising development induced me to re-examine the specific status of the red-shouldered wrens occurring along the coastal strip near Perth. On September 11, 1958, a party comprising two nuptial plumaged males and some two or three females, was seen in the coastal dunes at City Beach. A male specimen of *lamberti* was collected. Further observations made on November 8 and 20 at Swanbourne, City Beach and Scarborough revealed that *lamberti* was quite common. On November 20, in the *Acacia rostellifera* thickets growing in the coastal dunes at the Swanbourne rifle range, I found a nest of *lamberti* situated some 12 inches from the ground, containing three half-fledged chicks. The nest was placed in a clump of *Pelargonium drummondii* growing around the base of an *Acacia*. Attending the nest were at least two female plumaged birds and a brilliant nuptial plumaged male,

which was subsequently photographed in colour by P. Slater and shown to be *lamberti*. On the same day, three or four males were seen in the dune wattle thickets in this locality.

At the mouth of the Moore River on October 18, 1958, *lamberti* was found inhabiting the thick scrub of the coastal dunes, particularly those along the river mouth. Three parties were observed and a male specimen was collected. The following day two parties with fully plumaged males were seen in the thick dune scrub between Lancelin and Edward Island. A few miles inland from Laneelin, in the thickets of *Aeacia rostellifera*, *lamberti* was surprisingly common and a male specimen was collected.

The coastal strip between Lancelin and Dongara was investigated for the presence of *lamberti* at Cockleshell Gully where a male specimen was collected on March 27, 1959, and near Green Islets, where a male was taken on March 1, 1959. Red-shouldered wrens were plentiful at both localities and also in the dense wattle thickets along the lower portion of the Hill River, but the identity of the Hill River birds has not been ascertained.

M. pulcherrimus was found to be extremely common in the dense dune thickets of *Acaea rostellifera* at the Namban River, where three blue-breasted male specimens were collected on November 1 and 2, 1958. No evidence of the presence of *lamberti* was found but it doubtless occurs in the locality.

Observations on *elegans* were limited to the thickly grown margins of the Gingin Brook, north of Perth, and in the Darling Range, east of Perth. On October 18, 1958, at the Gingin Brook, some four miles from where it meets the Moore River, a male specimen was collected and others were seen. In the valleys of the Darling Range, particularly the Canning and Wongong, *elegans* was shown to be common, inhabiting dense *Grevilca diversifolia* and *G. manglesioides* thickets.

The specimens mentioned are now in the W.A. Museum.

VALIDITY OF PREVIOUS RECORDS

It was probably more than coincidental that only *lamberti* was collected in the coastal dunes near Perth since previously it was believed that the chestnut-shouldered wren inhabiting this region was *puleherrimus*. No specimens had been collected prior to my investigation but W. H. Loaring (1950), J. Lyon (1951) and J. R. Ford (1954) rechecked *puleherrimus* in this area. Ford and Teague (1959) also reported *puleherrimus* at Laneelin. The problem is whether these observations are valid.

Loaring recorded that the chestnut-shouldered wrens observed at the mouth of the Moore River had blue violet breasts which were unmistakable when the birds faced the direct sunlight. I would like to point out that this is not an infallible characteristic for field identification because I have collected male specimens of *lamberti* which, in the field, appeared to have dark blue breasts and conversely I have collected male specimens of *puleherrimus* which, in the field, appeared to have black breasts. This demonstrates that field identification of *lamberti* and *puleherrimus* is entirely unsatisfactory, and hence I would conclude that all chest-

nut-shouldered wrens seen in the coastal dunes near Perth and reported as *pulcherrimus*, are in fact *lamberti* until specimens of *pulcherrimus* are forthcoming.

Despite this last issue, there is an enormous overlap in the geographic ranges of *lamberti* and *pulcherrimus*, of some 240 miles, from the mouth of the Murchison River to the Namban River.

COMPARISON OF MATERIAL

All the specimens of *lamberti* collected near Perth were compared with those from further north, that is north of a line through Geraldton, Morawa, Caron and Kalgoorlie, and have been found to be identical. They clearly belong to the race *M. l. mastersi* (Maek, 1934 and Condon, 1951).

The specimens of *pulcherrimus* from the Namban River were identical with typical *pulcherrimus*.

This indicates that *M. lamberti* has passed through the geographic range of *M. pulcherrimus* to the vicinity of Perth, without any indication of inter-breeding, that is, the two forms are sympatric.

Serventy (1951) has previously shown that *elegans* occupies a distinctly different environment to that of the other two forms.

SUMMARY

The known distribution limit of *M. lamberti* has been extended southwards along the coastal plain to the Perth area. *Malurus lamberti* and *pulcherrimus* have large overlapping geographical ranges and are consequently sympatric. This supports previous views that the three forms of chestnut-shouldered wrens of the South-West are specifically distinct.

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